



Research Article

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Knowledge, practice & patient behavior regarding the health issues in Northern region of Bangladesh: A cross sectional study

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Abstract

A health survey was conducted from January to July 2017 in 6 districts of Rajshahi division. The study was conducted with structured questionnaire. A total of 1800 participants were involved in this study among them 58.94% are male and 41.06% female and their age limit lies between 18-80 years old. The data was collected from all the areas like village, Upazila town, District town and City corporations to identify exact scenario and to eliminate biasness of respondents. The study was conducted to investigate the knowledge, practice and behavior of respondents regarding health issue. Among the participants, 44.22% are higher educated, 17.83% are educated at higher secondary level 16.00% are secondary level and 12.94% are educated at primary level. About one third of the participants are unaware about their health right and one half of the respondents has no vivid idea about the specialty of doctor. Only 5% participants has health insurance and only 45.89% completely know about component of ideal diet. Only 12.44% participants are checking their health regularly and they are checked their health mainly for chronic disease 57.59%. About 35% patients are used normal food for nutritional make up, 42% use special food and 22% use medicine.

Keywords: Health insurance, specialty of doctor, ideal diet, medication purchase pattern, perception about health care system.

INTRODUCTION

The most important aspect for people in a country is health. It is globally recognized that health is an essential feature of human development. The overall development is not possible unless there is a development in health [1]. It plays an important role in economic sustainability and social development of a country [2]. The health should be on the highest attainable standard and it is imposed by World Health Organization (WHO) as health is the fundamental right [3]. Among the countries all over the world Bangladesh is the highest densely populated nation. At present its total Population is about 151 million [4]. The average life span for people in Bangladesh is 71 years, while the women having slightly extended life spans than men, 72 years [2]. Whereas the life expectancy in developed country is greater than Bangladesh. Life expectancy in United States of America is 76 years for male and for female 81 years [5]. At present there is huge challenge for Bangladesh to maintain standard in healthcare management system [2]. Bangladesh contains health policy. The main purposes of the policy include: delivering basic health services to the people at all levels, especially for poor people; confirming the healthcare services available at union and upazila/thana levels; improvement on maternal and child health and reproductive health services; and increase on family planning [4]. In this country majority of people is dweller of rural village. A huge inequality is existing between urban and rural people in health care facilities. People are also suffering due to lack of medical expertise and health care facilities [2].

Bangladesh may not be able to provide foreign nationals in the country with the services that they need. Government pays only 44% in health care sector. Health insurance facility in Bangladesh is not so developed [6]. In latest revision on health policy some recommendations have been introduced like starting a health insurance scheme and maintaining health cards for needy people. Some of the private organisations already starts health insurance to their employee [4]. Latest research shows that more than six million people are facing problems to maintain healthcare cost due to shortage of money. The Government has taken initiative to ensure health insurance for all by 2032 where the premium of poor people has been paid by the government [7]. In Canada, Governments spending 70 percent of the total health care cost [8]. Health insurance facility is largely available in developed country. There is no cost-

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sharing for the health care services guaranteed under federal law [9]. In 2014, about 66% of U.S. residents received health insurance coverage from private voluntary health insurance, 55.4% received employer-provided insurance [10].

Bangladesh is a low-income country where 36% of the population lives on less than 1 US dollar per day [11]. The relationship between income and health is a gradient [12]. Mortality rate of adults in Bangladesh has been strongly influenced by socioeconomic status and education [13]. The literacy rate of population of Bangladesh is about 51.8% [14]. In Bangladesh, adult male mortality rate (per 1000 male adults) is 163. And mortality rate of adult female (per 1000 female adults) is 137 [4].

Education is correlate to good health. Better educated persons are, through healthier lifestyles, expected to be more efficient producers of health [15]. Research data suggests that educated people have lower mortality rate [16]. In United Kingdom, Literacy rate is 99%, and adult mortality rate (per 1000 male adults) is 96 and female mortality rate (per 1000 persons) is 59 [17]. Education is regarded as an important parameter of mortality rate and also been conformed from study in Eastern Europe [18]. It also affects preventive strategy on disease, encourage to cooperate with healthcare providers, increases understanding on health issue and to avoid potential risk factors [13].

Malnutrition is a common phenomenon in South Asia especially in Bangladesh. Its prevalence is more in women [4]. Nutritional profile of Bangladeshi women shows that about one-third of women has body mass index less than 18.5 at reproductive age which is an indicator of underweight. Even among the wealthiest quintile of society, 13 per cent of women are underweight [19]. Malnutrition is a real and prominent problem in developed country. In Australia approximately 40% of patients affected in malnutrition [20].

To be aware of health right, knowledge on health is the key factor and knowledge on it helps to fulfill their demands on health issue [21]. Knowledge about health rights is a part of development. But, citizens of Bangladesh are not aware about prioritizing and progressive realization of these health rights and further contribution to underdevelopment of Bangladesh [1]. Other country like Canada, not only adult but also young people are aware about health rights. Youth are enjoying their legal health rights that are protected through various federal, provincial and territorial laws and regulations [22].

Periodic health check-up helps to lead better life by reducing morbidity and mortality of disease as it is an early warning signal of disease. It also elevated life span of people. A study on South East Nigeria found that about 74.9% people were aware of periodic medical checkup [23]. In Bangladesh, periodic health checkup practice is very rare among overall people. In chronic disease condition, like Diabetes, people undergo routine checkup in medical chamber monthly or at least once in a 3months [24]. A study found that, in Dhaka city of Bangladesh, more than one-third (37%) of the participants checked their blood glucose 2-3 month interval. Similarly, another study in Australia, approximately 80% patients checked their blood sugar level at least one within 3 months [25].

Bangladesh is developing in health care services. But patient's satisfaction is very important. Bangladesh people are not fully satisfied in overall health care service [26]. Other developed country people are satisfied in their health care service like New Zealand, People who have been treated in public hospitals, outpatient and accident and emergency services, found an increasing satisfaction levels over the past six years [27].

MATERIALS AND METHODS

Setting and Design

A self-designed standard questionnaire was used to collect data from

1800 respondents to fulfill this cross sectional studies. Six districts of Rajshahi division were selected for collecting the data for over six month's period from January to July, 2017. Rajshahi is located in the north-west of Bangladesh (Figure 1) having an estimated population of 2,595,197 and total area is 2,407.01 km² (929.35 sq mi) [28]. Another district Gaibandha is surrounded on the north by Kurigram and Rangpur districts, on the south by Bogra district, on the east by Jamalpur, Kurigram districts and Brahmaputra river, on the west by Dinajpur and Rangpur districts. The area of the district is approximately 2179.27 sq km. and Covers a Population of 23,79,255 [29]. Naogaon, one of the old city of Bangladesh consists of 2,600,157 people and has area of 3,435.65 km² (1,326.51 sq mi) [30]. Another city Natore, which, has an area of 1896.05 km² (733.67 sq mi) and total population of 1,706,673 [31]. Sirajganj is the gateway to the North Bengal, and it has area of 2,497.95 km² (964.46 sq mi) and total population is 3,097,489. [32]. Chapai Nawabganj is located on the north-western part of Bangladesh. It has total area of 1,702.55 km² (657.36 sq mi) and population of 1,647,521 [33]. In this health survey, any patient who was prescribed one or more psychotropic drugs at any stage during this study is included in this survey.

The main objectives of the research was to find out the Knowledge, Practice & Patient Behavior Regarding the Health Issues in Northern Region of Bangladesh. We have investigated about patients choice on awareness about regular health checkup at elderly, dieting pattern, health care center, specialty of doctor, medication purchase pattern, impact on financial issues, and their perception about the present condition.



Figure 1: Map of Rajshahi division.

Data Collection

Data were collected from the participants by random selecting the participants from hospital, pharmacies and by home visit. The data collectors were convincing the peoples to participate in the interview session. The language of the questionnaire was English which is translated to Bengali language by the data collectors to the participants whom mother tongue is Bengali language. The Bengali answers given by the respondents translated to the English languages in the same way by the data collectors. Written consent was taken from each patient during this study. A small number of questionnaires were excluded due to inadequate information.

Statistical Analysis

The data was analyzed by Microsoft office Excel 2013 software.

RESULTS

Sample characteristics

In the survey among the 1800 participants most of them are 18-30 years old followed by 31-40 years and then 41-50 years old (Figure 2).

Male participants consisting about sixty percent while female participants consisting forty percent (Figure 3).

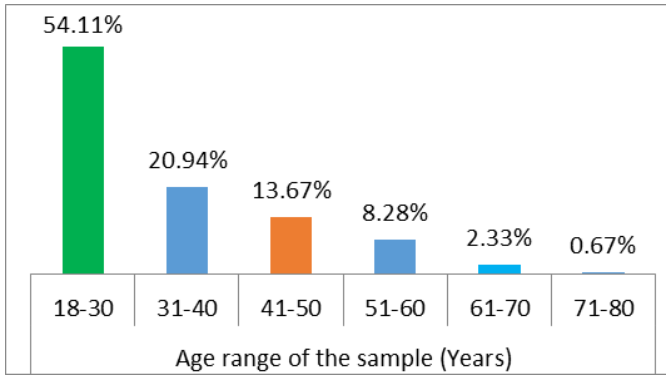


Figure 2: Age of participants.

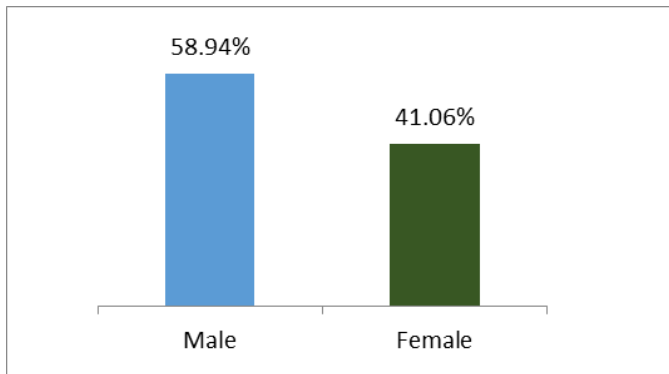


Figure 3: Gender of participants.

This study finds that more than ninety percent of respondent's are educated. More than forty percent of them are higher educated while a reasonable portion of them are higher secondary, secondary and primary educated (Figure 4). The participants are accommodated in village, Upazila town, District town and also City corporation areas.

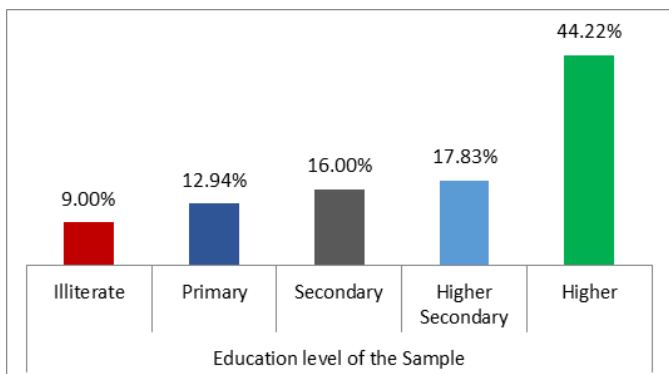


Figure 4: Educational level of participants.

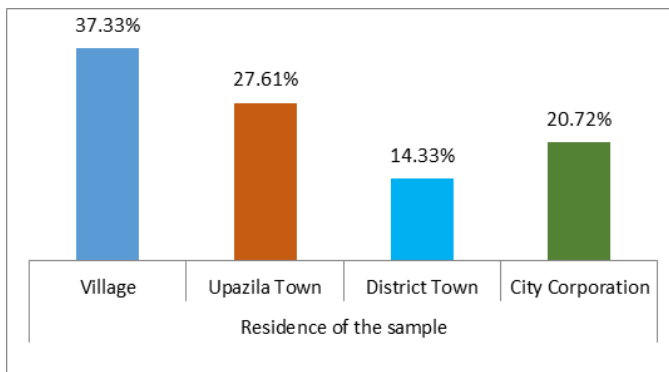


Figure 5: Residence of the sample.

Health is the fundamental rights of human being, and about two third percent are aware of it while about thirteen percent respondent's think health is general right and about twenty percent respondent's has no idea about it (Figure 6).

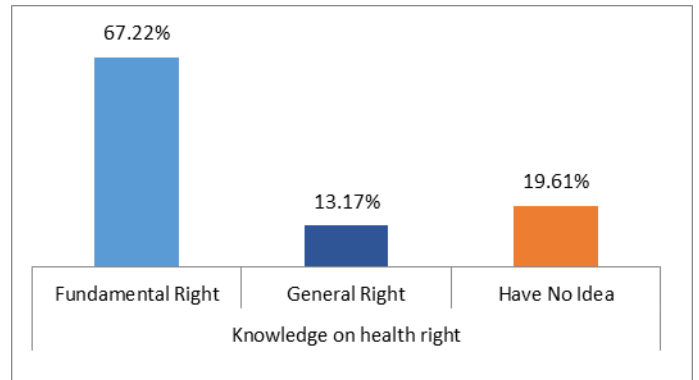


Figure 6: Knowledge on health right

About fifty percent of respondent's has clear and vivid idea about specialty of doctor and about thirty percent has partially knowledge while about twenty percent respondent's has no idea on the specialty of doctor. It is observed that about 15.33% participants has knowledge about health insurance and 84.67% has no idea about health insurance (Figure 8). Among the patients who are aware about health insurance, only 5% has health insurance and the rest of them has no health insurance.

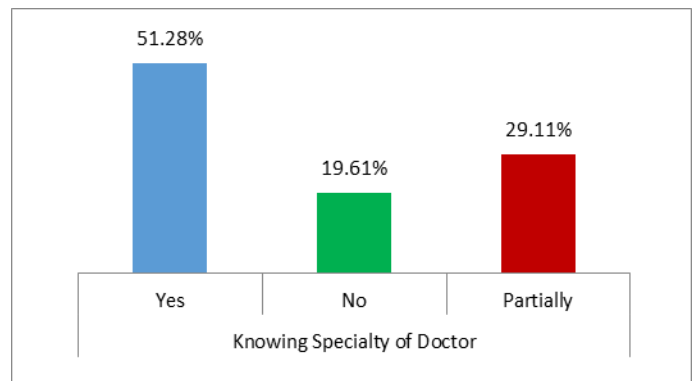


Figure 7: Knowledge on specialty of doctor

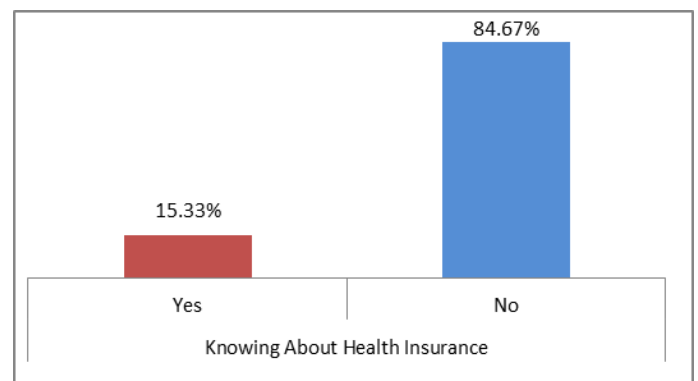


Figure 8: Knowledge on health insurance

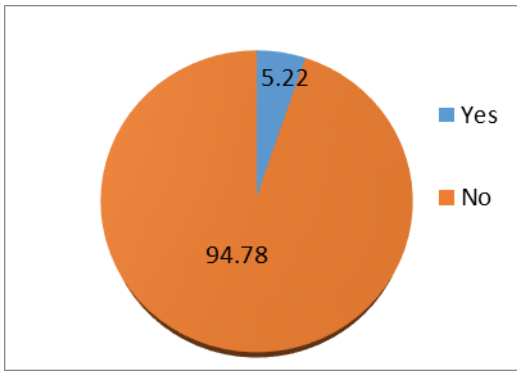


Figure 9: Having health insurance

About forty six percent people has knowledge about the component of ideal diet and only twenty three percent participants only makes sufficient plan for their diet (Figure 10 & Figure 11).

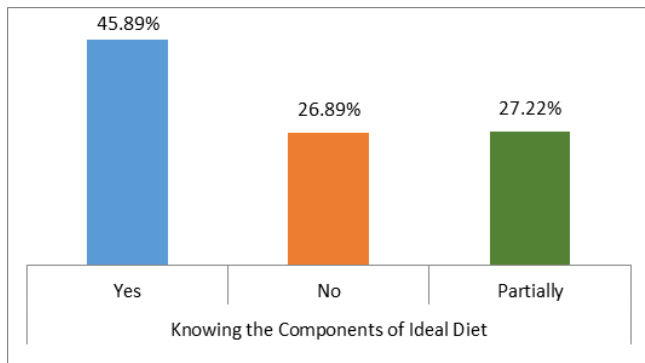


Figure 10: Knowledge on components of ideal diet.

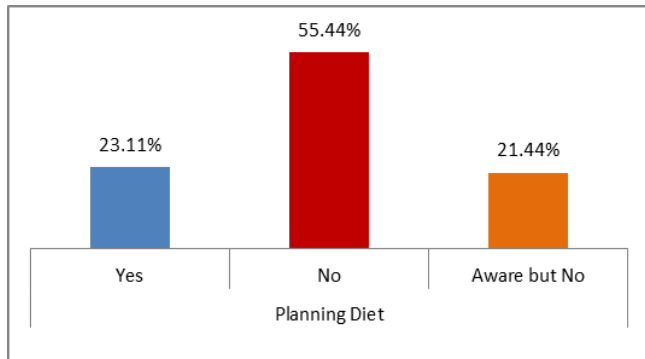


Figure 11: Practice about planned diet

Periodic health checkup an evitable component of being away from severe disease and in this study about ninety percent people are not checked their health periodically (Figure 12) and the people who checked periodically to their health mainly for chronic disease.

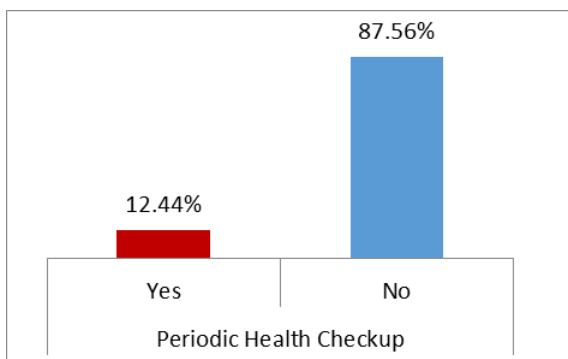


Figure 12: Periodic health checkup

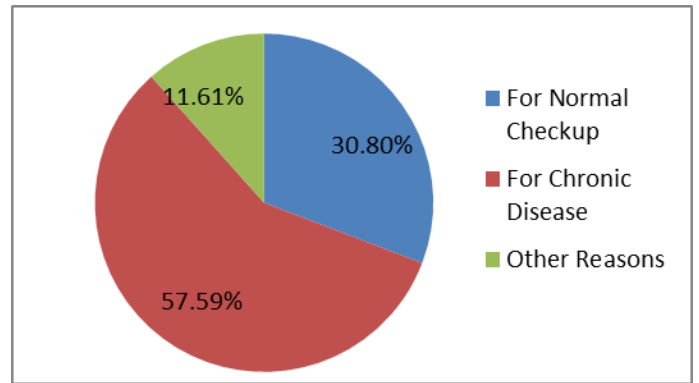


Figure 13: Reason for periodic checkup

Nutritional deficiencies lead physical and mental problems of a person and affects social life [34]. If a person fulfills the nutritional demand for his family members, they are living longer than other. Here the respondents said that they are using normal food and special food for nutritional recovery, but some of them are also takes medicine for it.

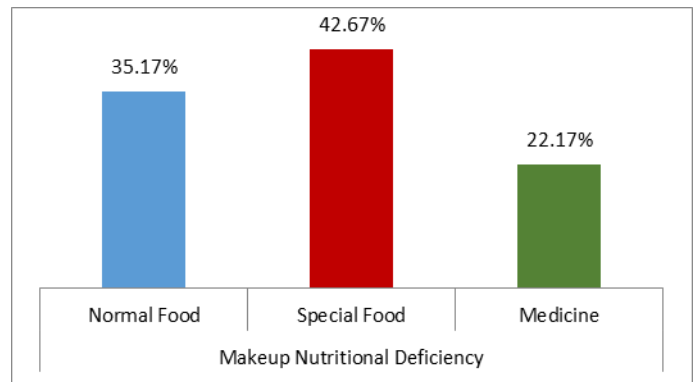


Figure 14: Makeup nutritional deficiency.

Medicines should be stored under conditions which ensure that their quality is maintained unless it causes harm when someone uses it. Inappropriate medicine use may leads to drug degradation and toxic effects. It is found that majority of the respondents are following storage condition.

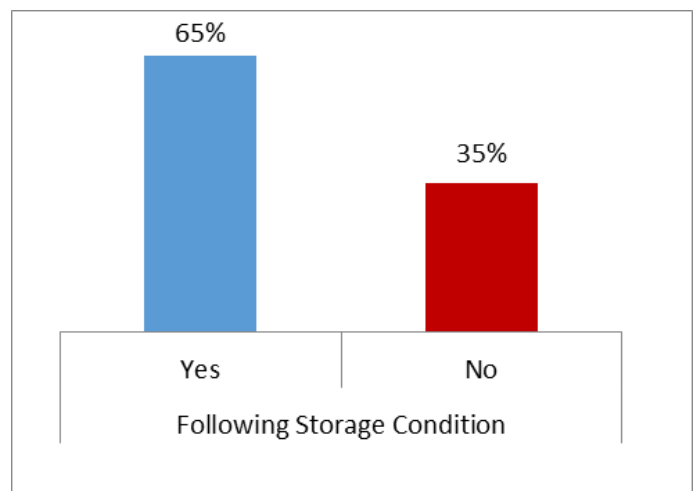


Figure 15: Following storage condition.

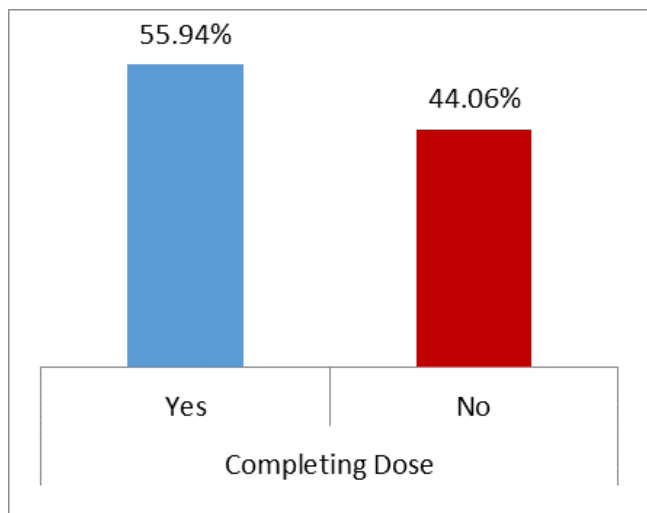


Figure 16: Completing dose.

Therapeutic dose has been found to be related to more desirable clinical outcome. In this study only about half of the people are completing guided dose.

DISCUSSION

In the present study among 1800 patients 54.11% respondent's are 18-30 years old, 20.94% participants are 31-40 years and 13.67% samples are 41-50 years. About 58.94% respondent's are male while females consisting 41.06%. This study shows that about lions share of people are educated. It is observed in this survey that 44.22% participants are higher educated, 17.83% are educated at higher secondary level 16.00% are secondary level and 12.94% are educated at primary level (Figure 4). This study also shows that 9.0% participants are illiterate. As the information's are collected various areas so, the respondents from village, Upazila town, District town and City corporations are involved.

Human rights are legal and moral rights, origin by birth and can be claimed by any person all over the world [35]. According to WHO recognition of health as fundamental right and subsequent approval of health by the Universal Declaration of Human Rights (UDHR) and the International Covenant on Social, Economic and Cultural Rights (ICSECR) [36]. It is extracted from the study that more than two third of people are aware about health as fundamental right. A total of 67.22% participants are consent about health as fundamental right and 13.17% participants are thinking health as general rights while 19.61% respondent's has no idea on it (Figure 6).

It is known that knowledge about specialty of doctor helps the patients to get quick response from disease. About 51% participants has clear idea about specialty of doctor 29.11% has partial idea while 19.61% has no knowledge on the specialty of doctor (Figure 7). Health insurance is available in developed country but the peoples of developing and poor countries has lack of knowledge and access of it. In this survey 15.33% participants has idea about health insurance and 84.67% are unaware about it (Figure 8). Among the consent people only 5.22% has health insurance (Figure 9).

Diet is a vital component for keeping sound health and to strengthen body's defense mechanism against various disease. From this survey it is observed that only 45.89% participants completely know about component of ideal diet, while 27.22% participants has partial knowledge on it. But 26.89% participants has no idea on ideal diet (Figure 10). It is also found that 23.11% participants planned for their diet and 55.44% participants are not make any plan for their diet and rest of them are planned partially (Figure 11). Periodic health checkup is an early warning system for disease and helps to combat disease at beginning stage and increases the rate of recovery. Only 12.44%

participants are checking their health regularly and they are checked their health for chronic disease 57.59%, for normal checkup 30.80% and rest for other reason (Figure 12 & Figure 13).

Healthy diet is inevitable for all people especially for female and children to make-up nutritional deficiency and to lead a longer life. Deprivation of this leads to diseases and adverse conditions [37]. In the present study about 35% patients are used normal food for nutritional make up, 42% use special food and 22% use medicine for this purpose.

Drugs to be stored under condition that prevent contamination and deterioration. Precautions to be taken in relation to the effects of the atmosphere, moisture, heat & light. About 65% participants are using storage condition as labelled on the container. Dose completion is an inevitable part of effective therapy and it is found in this study that only 56% patients are completing the dose.

CONCLUSION

The present study concludes that the patients are not having the elementary knowledge about medications, most of them not following the physician's advice and discontinuing medications on their own if they feel better and thinking that drugs are magic remedies for their health. This circumstance may perhaps due to low literacy rate of rural areas and deficiency of proper hospital arrangements. This study finds that large amount people are unaware about health right, specialty of doctor, and other perspectives. In case of health insurance only 15.33% know about it and only 5.22% has it. It is a demand of time to reform Health insurance and increase governmental budget on health sectors [38].

Ethical Considerations

This study is logistically supported by the Department of Pharmacy, Varendra University, Rajshahi. We did not use any type of chemicals and risky instruments during the study. Written consent was taken from every participant and ensures that this data is only used for research purpose.

Competing interests: None

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